



Exponential Function Solution Equation - Decay (Discrete) Equation to Rate

1 Rearrange this equation to solve for the rate given this model of a decline of a toxin concentration (monthly dialysis)?

$$507 = 600 \cdot (1 - r)^{(2)}$$

A $r = +\left(\frac{507}{600}\right)^{\frac{1}{2}} + 1$

B $r = -\left(\frac{507}{600}\right)^{\frac{1}{2}} - 1$

C $r = -\left(\frac{507}{600}\right)^{\frac{2}{2}} - 1$

2 Rearrange this equation to solve for the rate given this model of a decline of a bird population (yearly breeding cycle)?

$$708 = 800 \cdot (1 - r)^{(4)}$$

A $r = -\left(\frac{708}{800}\right)^{\frac{1}{4}} - 1$

B $r = +\left(\frac{708}{800}\right)^{\frac{1}{4}} + 1$

3 Rearrange this equation to solve for the rate given this model of a decline of a toxin concentration (weekly dialysis)?

$$260 = 300 \cdot (1 - r)^{(7)}$$

A $r = +\left(\frac{260}{300}\right)^{\frac{1}{7}} + 1$

B $r = -\left(\frac{260}{300}\right)^{\frac{1}{7}} - 1$

C $r = -\left(\frac{260}{300}\right)^{\frac{7}{7}} - 1$

4 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (daily disbursements)?

$$570 = 700 \cdot (1 - r)^{(4)}$$

A $r = +\left(\frac{570}{700}\right)^{\frac{1}{4}} + 1$

B $r = -\left(\frac{570}{700}\right)^{\frac{1}{4}} - 1$

5 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (yearly disbursements)?

$$171 = 300 \cdot (1 - r)^{(9)}$$

A $r = -\left(\frac{171}{300}\right)^{\frac{9}{9}} - 1$

B $r = -\left(\frac{171}{300}\right)^{\frac{1}{9}} - 1$

C $r = +\left(\frac{171}{300}\right)^{\frac{1}{9}} + 1$

6 Rearrange this equation to solve for the rate given this model of a decline of a bird population (yearly breeding cycle)?

$$335 = 600 \cdot (1 - r)^{(8)}$$

A $r = -\left(\frac{335}{600}\right)^{\frac{8}{2}} - 1$

B $r = -\left(\frac{335}{600}\right)^{\frac{1}{8}} - 1$

7 Rearrange this equation to solve for the rate given this model of a decline of a toxin concentration (daily dialysis)?

$$434 = 500 \cdot (1 - r)^{(7)}$$

A $r = -\left(\frac{434}{500}\right)^{\frac{7}{7}} - 1$

B $r = -\left(\frac{434}{500}\right)^{\frac{1}{7}} - 1$

C $r = +\left(\frac{434}{500}\right)^{\frac{1}{7}} + 1$

8 Rearrange this equation to solve for the rate given this model of a balance of a charitable endowment (yearly disbursements)?

$$661 = 900 \cdot (1 - r)^{(6)}$$

A $r = -\left(\frac{661}{900}\right)^{\frac{6}{2}} - 1$

B $r = +\left(\frac{661}{900}\right)^{\frac{1}{6}} + 1$

C $r = -\left(\frac{661}{900}\right)^{\frac{1}{6}} - 1$